

The  $\{X[k]\}$  may be estimated by applying a discrete Fourier transform to the samples of a single period (or small number of periods) of  $e(n)$  as in Figures 3b-3c 2a-2b. The preferred embodiment only uses the magnitudes of the Fourier coefficients, although the phases could also be used. Because the LP residual components  $\{e(n)\}$  are real, the discrete Fourier transform coefficients  $\{X(k)\}$  are conjugate symmetric:  $X(k) = X^*(N-k)$  for an  $N$ -point discrete Fourier transform. Thus only half of the  $\{X(k)\}$  need be used for magnitude considerations. Of course, with a pitch period of  $p$  samples,  $N$  will be an integer equal to  $[p]$  or  $[p]+1$ .

Please replace the first paragraph on page 12 with the following amended paragraph:

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(2) apply speech activity detection to each of the six eight 20-sample sub-frames of the frame; the speech activity detection may be by the sum of squares of samples with a threshold.

Please replace paragraph (12) on page 15 with the following amended paragraph:

(12) pick the pitch candidate as follows (compare Figure 3): if  $pcorr[0]$  is less than  $4 * \text{threshold}$ , then put  $i = -1$ ; if  $pcorr[0]$  is at least  $4 * \text{threshold}$ , then  $i = 0$  unless  $pcorr[k]$  is at least  $0.8 * pcorr[0]$ , then take  $i = \text{the largest such } k$  unless additionally  $pcorr[k]$  is less than  $0.9 * pcorr[0]$  in which case take  $i = -1$ .